PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

APR 2 1930

NEW CHINESE MAMMALS. BY A. BRAZIER HOWELL.

Further work upon the Chinese mammals contained in the U. S. National Museum has brought to light three more undescribed races, which may be known as follows:

Pithecus pullus, sp. nov.

Type.—Male, young adult, skin and skull no. 252,157, U. S. National Museum, from Kuatun, Fukien, China; date unknown. Collected by F. T. Smith; original number 85.

Diagnosis.—A large, short-tailed macacque related to P. thibetanus but uniformly of a chocolate color.

Skin.—The dorsal coloration is rather dark chocolate with a suggestion of black overwash. The long full hairs are strongly waved and the play of light over the curves of these waves gives the appearance of several distinct annulations of lighter brown. The guard hairs of the dorsum are tipped with blackish, less densely so upon the sides, and over the thighs the dark tips are replaced by a golden brown, to be seen only in a favorable light. Below the coloration is a shade paler, the hairs being without darker tips. The eyebrows and scanty hairs about the face are broadly tipped with shining black. The sides of the head are of the same color as the remainder of the animal save that the hairs do not have darker tips.

Skull.—The posterior nares exhibit the narrowness and height characteristic of the stub-tailed macacques, but less marked than in *thibetanus*, and the bullae are less prominent than in that animal. The age is such that the temporal fossae do not quite meet.

Measurements.—Collector's measurements of the type are given in inches, as originally taken, followed in brackets by their equivalents in millimeters. Length of head and body, $23\frac{7}{8}$ (605); tail, $2\frac{5}{8}$ (66); hind foot, $7\frac{1}{8}$ (181); and ear, $1\frac{1}{2}$ (38). The greatest length of the skull, exclusive of the teeth, is 140; occipito-nasal length, 120; length of nasals, 28.5; zygomatic width, 89; height of posterior nares, 15.5; width across posterior nares (both), 13; and length of mandibular molariform series, 40 mm.

Remarks.—It has been known for many years that two species of Pithecus occur in the vicinity of Kuatun. The commoner was described by Elliot

under the name *littoralis* and the other presumably has not heretofore been secured and preserved by a naturalist. Arthur deC. Sowerby has recently presented to the U. S. National Museum a splendid specimen of this monkey, which proves to be a short-tailed macacque of the *thibetanus* rather than the usual *rhesus* group, and entirely distinct in coloration from anything heretofore known.

Rattus humiliatus sowerbyi, subsp. nov.

Type.—Male, young adult, skin and skull no. 199,620, U. S. National Museum, from near Imienpo, north Kirin, Manchuria, at an altitude of 500 feet; October 15, 1914; collected by Arthur deC. Sowerby; original number 735.

Diagnosis.—A large dark race with the blackish hairs of the dorsum very thick, sootiness of the face pronounced, and foot relatively long.

Skin.—The dorsal coloration is a warm tone of brown with plentiful admixture, rather evenly distributed, of blackish guard hairs. The head is less brown and the face is pronouncedly sooty, with white upper lips. Both fore and hind feet are well covered with snowy white hairs. The tail is bicolor, the scales very fine as in the other races and the hairs even more plentiful than usual. The sides are less brown and with fewer black hairs, the color merging into that of the underparts, which is plumbeous basally with the hairs broadly white distally, showing the faintest tinge of yellow. The ears are rather small as in typicus, the feet are very large, and the tail relatively short (90 per cent of the head and body).

Measurements.—Collector's measurements of the type are: head and body, 177; tail, 158; hind foot, 37 (38 in both dried skins); and ear probably 19 mm. (mistakenly marked 29 upon the label). Total length of the skull is 41; zygomatic width, 20; interorbital width, 6; nasal length, 14.4; and maxillary tooth row, 7 mm.

Remarks.—I do not know the precise color characters of typical humiliatus and apparently no one since Pere David has succeeded in capturing this rat near Peking. Indeed, doubt has been cast upon this really being the type locality for that very reason. But the measurements are known and hence, although it is represented by but two specimens, I have no hesitation in naming this new race on the character of size—chiefly large foot and to a lesser degree, short tail and probably large body. It is extremely likely, however, that color characters of darker back and more sooty head will prove to be valid criteria also, conforming to what one expects to find in the case of mammals from the two regions in question. As in the other races, one may at once distinguish sowerbyi from rats of the norvegicus group by the silkiness of the fur and more flaring (less precisely parallel) cranial beading.

In the naming of this race another opportunity is taken of expressing appreciation of the great value of the continued zoological collecting in China by Mr. Sowerby.

Euchoreutes naso alashanicus, subsp. nov.

Type.—Female adult, skin, skull and trunk skeleton no. 240,764, U. S.

National Museum, from the Alashan Desert, Inner Mongolia, 100 miles north-northwest of Ningsia, Kansu, China; collected April 26, 1923, by F. R. Wulsin; original number 1054.

Diagnosis.—Like *naso* but coloration more ochraceous and paler; bullae larger.

Skin.—Save where the plumbeous bases of the hairs show through there is no suggestion of gray in the dorsal coloration but only buffy ochraceous, each hair having the faintest of black tips. Below the hairs are white to their bases. The pig-like raised border of the nasal pad, characteristic of this genus, is very distinct. The ears are even more remarkable than is indicated by Sclater's plate of naso and are undoubtedly larger in proportion to the size of the body than in any other rodent. They are scantily covered both within and without by exceedingly short white hairs. The anterior edge of the pinna is fringed with a single row of fine white hairs some 4 mm. in length, this acting as a screen to exclude from the inner ear chance particles of dirt. The white tip of the tail has been broken off. The long claws of the fore feet and the extremely large, fleshy pads of the hind toes are much in evidence. The soles of the latter are naked but there is a fringe of long hairs upon the outer border of the second and of the fourth toe.

Skull.—The skull is exactly of the same length as that of the type of naso, making its comparison with the figure of the latter entirely satisfactory. The left bulla and the palatal region are damaged, but the right bulla is intact and distinctly larger, especially ventrad and rostrad, than in naso. The posterior terminations of the nasals are also more rounded.

Measurements.—Collector's measurements of the type are as follows: total length, 241; tail (imperfect), 150; foot, 41; and ear, 41. In the dried skin the foot measures 40.5 mm. Total length of the skull is 29.5; sagittal length of bulla, 11.3; transverse width of bulla, 8.4; and height of skull through bulla, 12 mm.

Remarks.—This specimen is one from the collection made by F. R. Wulsin and presented to the National Museum by the National Geographic Society. It apparently constitutes the third recorded instance of capture of this genus and the occurrence of a race in southern Mongolia is one of the most interesting facts encountered during a study of the Chinese mammals in the National Collection. The type locality is in the Alashan Desert north and west of the Holanshan Mountains, which constitute a part of the boundary between Mongolia and Kansu. A considerable proportion of this district is known to be sandy.